

# [SILICON STORAGE APPARATUS, CONTROLLER AND DATA TRANSMISSION METHOD THEREOF]

## Abstract

A silicon storage apparatus, a controller and a data transmission method thereof are disclosed. The storage apparatus comprises a solid-state storage medium and a controller. The controller further comprises a system interface, a memory interface, a processor, a cache buffer area, an allocation buffer area and a transmission buffer. By the cooperation of the cache and the allocation table buffer area, the data not required by the system terminal are stored in the solid-state storage medium for improving the cache request hit rate. Therefore, the times of searching the solid-state storage medium is reduced and the transmission performance is increased.